

"Amateur Radio: Combining communication experience with modern digital techniques."

***SARL 80 m Club Contest, CW, 24  
November***

***CQ WW DX CW Contest 27 and 28 November***

***PEARS HF Contest 6 December***

***ARRL 10 Metre Contest 11 and 12 December***



## What went wong?

There was a gremlin at work last week! The HF Happenings I sent out in PDF format arrived in your inbox back-to-front; you needed a mirror to read it. On the other hand, turn the screen around! How it happened I do not know.

Thanks to Betty, F6OIC, John, G3WKL, and Rune, SM5COP, for bring this to my attention.

I use CutePDF to convert the document from MS Word to PDF.

## ZS6BB Achieves the First ZS WAGS Award for all 83 Grid Squares

Pierre van Deventer, ZS6BB, recently achieved the top ZS WAGS award with his submission for all 83 grid squares on mixed bands and modes. Getting the last grid square took him many months, and was only completed by a contact with a Botswana station for KG25, a grid with a very small footprint in Southern Africa.

To achieve this award Pierre had to take full advantage of mobile stations for many grids in which there are very few no resident amateurs, and included contacts on SSB, CW, Satellite and even PSK31.

The ZS WAGS operating award was launched in early 2009. To date, a total of 35 hunters' awards have been issued, as well as 17 awards for stations that activated rare grid squares.

The ZS WAGS award is operated by the Sandton Amateur Radio Club. Visit <http://www.zs6stn.org.za/zswags/> for the rules and complete records of all awards.

Well done, Pierre!!

## CQ WW CW

Yes, the 2010 CQ WW DX CW contest is on the air at the end of the month - 27 and 28 November. CW on 160, 80, 40, 20, 15 and 10 metres, the exchange is a RST report and your CQ zone, for South Africa that is zone 38.

Four guys have been doing the same contest for many years. Four days before the CQ WW contest, Ron's wife puts her foot down and tells him he is not going. Ron's friends are very upset that he cannot join them, but what can they do? They are an op short.

Two days later the three get to the contest site only to find Ron sitting there checking 20 metre propagation, the logging programme and a cold 807.

"Damn man, how long have you been here, and how did you talk your wife into letting you come?"

South African Radio League 1925 - 2010 Suid-Afrikaanse Radioliga  
Member Society of the International Amateur Radio Union Region 1  
HF Happenings via Yahoo Groups [HF\\_Happenings-subscribe@yahoogroups.com](mailto:HF_Happenings-subscribe@yahoogroups.com)

HF Happenings 431



## November

6 RaDAR Contest  
6/7 ARRL CW Sweepstakes  
7 National Marine Day  
11 Armistice Day  
14 Remembrance Sunday  
20/21 SARL Field Day  
20/21 ARRL SSB sweepstakes  
21 Closing date CW WW DX Phone logs  
24 SARL Club CW Contest  
27/28 CQ WW DX CW Contest

## December

1 World Aids Day; Closing date SARL Club logs  
2 Hanukkah  
4/5 ARRL 160 metre contest  
5 PEARS HF contest  
6 Closing date SARL Field Day logs  
7 Muharram  
10 Schools close; Int. Human Rights Day - Namibia  
11/12 ARRL 10 metre contest  
16 Day of Reconciliation  
21 Summer Solstice; closing date CQ WW DX CW logs  
25 Christmas Day  
26 Family Day  
27 Public Holiday  
31 Closing CQ DX Marathon; Closing date PEARS HF logs

"Well, I've been here since last night. Yesterday evening, I was sitting in my chair and my wife came up behind me and put her hands over my eyes and said, "'Guess who?" I pulled her hands off, and she was wearing a brand new nightie. She took my hand and pulled me to our bedroom. The room had candles and rose petals all over. On the bed, she had handcuffs, and ropes! She told me to tie and cuff her to the bed, and I did.

And then she said, "Do whatever you want."

So, here I am ....

(Thanks to Hal, ZS6WB, for this item.)

## SARL Spring QRP Results

According to the logs received there were 62 stations on the air. Conditions were not favourable for long distances. The sad part is that only five logs were received. The results are as follows:-

1<sup>st</sup> Pierre v Deventer, ZS6BB, 819 points (SSB and CW)

2<sup>nd</sup> Port Elizabeth ARS, ZS2PE, operated by Andre Le Roux, ZS2AL, Andrew Prideaux, ZS2PA, and Peter Flynn, ZS2PF, 576 points (SSB)

3<sup>rd</sup> Geoff Levey, ZS6GRL, 375 points (SSB)

4<sup>th</sup> Pam Momberg, ZS6APT, 184 points (SSB)

5<sup>th</sup> Derek Stuart, ZS2J, 12 points (SSB)

## 2<sup>nd</sup> SARL RaDAR Contest Results

Seventy-three call signs were logged during the contest. Band conditions for long distance communications were not good. From logs received to date, most activity took place on 40 m together with a few LEO FM Satellite contacts and one PSK contact on 20 m. All ZS divisions were active. The rain and other circumstances made it difficult to be active for the full six hours. The darkness only set in towards the very end much unlike the winter contest. Only six logs were submitted and the results are as follows:

X1 : for all home stations using normal antennas and mains power.

Theunis ZS2EC (QRP) 25 Points

X2 : for all home stations not relying on their normal antennas or mains power.

No entry

X3 : for portable operation i.e. away from normal home station , not relying on mains power. This would include all mobile stations.

1<sup>st</sup> Christo, ZR6LJK, QRP, 75 points

2<sup>nd</sup> Derek, ZS2J, QRP, 66 points

X4 : for true RaDAR portable operations not relying on existing antennas or mains power.





No entry

X5 : for true RaDAR portable operations as above and using QRP. Output power limited to 5 watts PEP.

1<sup>st</sup> Stephen, ZS6SKY, QRP, 125 points

Eddie, ZS6BNE, QRP, 100 points

Pierre, ZS6BB, QRP 75 points

Contacts were made using the digital modes by Christo, ZR6LJK, and via Satellite by Eddie, ZS6BNE, and Stephen, ZS6SKY, which scored each a bonus 5 points for their first contact.

It appears many do enjoy taking part in this rather dynamic contest, more for the fun of it than in a competitive way. The scoring method has been revamped for future contests and has been updated in the SARL "Blue book".

## ZR Licence Holders - Be Careful

ZR licence holders should take note of the frequencies allocated to them. Recently a ZR was heard making a contact with a DX station on a 20 m frequency outside the ZR allocation. ZR stations may only use the following 20 m spectrum, 14 070 - 14 099 kHz and 14 225 - 14 350 kHz. On 15 metres, ZR's may use 21 070 - 21 120 kHz and 21 300 - 21 450 kHz, and on 10 metres, 28 070 - 28 150 kHz and 28 300 - 28 500 kHz. Operating outside the allocated frequencies constitutes a violation of the licence conditions, which may result in cancellation of the licence - and a fine - or both. Please take note.

## 2011 SARL Contest Manual - draft

Geoff Levey, ZS6GRL, the SARL Contest Manager and his team have released the draft version of the 2011 SARL Contest Manual. They would like branches, clubs and radio amateurs to work through the document and provide them with your comments and/or suggestions.

There are a number of changes to certain contests - there are four QRP Sprints, also four Digital contests during the year. The Field Day rules have been revamped with frequency changes, bonus points and new classes of participation. The emphasis is on advertising amateur radio to the public. It is now the National Field Day.

The March Madness YL Sprint has been added, celebrating International Women's Day on 8 March. In South Africa, we celebrate National Women's Day on 9 August.

The 2011 Contest manual is available on the SARL web site at <http://www.sarl.org.za/public/contests/contestrules.asp>. It is also available on the HF Happenings web site at [http://groups.yahoo.com/group/HF\\_Happenings/files/](http://groups.yahoo.com/group/HF_Happenings/files/)

## DXCC News

Bill Moore, NC1L, the ARRL Awards Branch manager, reports that the following operations are approved for DXCC credit:

5XØCW - Uganda, 2010 Operation

D2QV - Angola, 2010 Operation.

If you have had this operation rejected in a recent submission, please send a note to [dxcc@arrl.org](mailto:dxcc@arrl.org).

## Hints & Kinks: Sealing PL-259 UHF Plugs and SO-239 UHF Connectors





Don Dorward, VA3DDN, of Pickering, Ontario, sent us this idea for seals for PL-259/SO-239 connectors. Contact Don via e-mail at [va3ddn@arrl.net](mailto:va3ddn@arrl.net) for more information.

The popular and low-cost PL-259 UHF plug and its mating SO-239 UHF connector were never designed to be waterproof. In spite of this, many of us find ourselves having to use these connectors out-of-doors for an antenna or cable connection and then have the experience of trying to apply some form of weatherproofing.

If this is not done, and done well, then intermittent connections soon result, especially with wet freezing and thawing conditions, resulting in moisture and corrosion getting into the connectors and even into the coax itself.

One well-known solution is to use a bondable rubber tape wrapping. That often seems to work using one of the soft, mouldable, stretchable tapes that are available for the purpose. In practice, I have found that the hardest area to seal effectively using this method is the area from the rim of the male PL-259 shell to the mating SO-239 socket face.

This is especially true when the SO-239 socket is located partially inside the cowl of the antenna mount (such as the Solarcon/Antron vertical or other similar types) and it is impossible to get sealing tape up into this tight location.

To overcome this problem, simply slip as many tight fitting O-ring(s) over the SO-239 barrel (see Figure) as needed to fill the space between the base of the SO-239 and the coupling ring. Lubricate the O-rings with a generous amount of silicone grease, often sold in the automotive part stores as "dielectric tune-up grease."

Important: Check that when the mating PL-259 plug is installed and tightened down, the outer rim of the PL-259 shell butts up against and slightly compresses the "O"-ring(s). The "O"-rings I used were ones I had on hand, about 9/16 inch ID 0.10 inch thick. I am sure anything that is a snug fit will work. Of course, you will still need to wrap the lower half of the PL-259 shell and the spot where the coax exits the connector with tape to seal that part.

## New stealth antenna book released

Steve, GOKYA, says, "I'm pleased to announce that my new book on amateur radio 'Stealth Antennas', which was launched at the Newark Hamfest in the UK, is now available to buy from the RSGB. It will also be available from the ARRL in due course.

It looks at a host of stealth antennas, including indoor dipoles, magnetic loops, stealth verticals, flagpoles, birdhouses and others. It also looks at more esoteric designs like the EH, Microverts, microloops, Isotrons, plus lots of case studies from around the world.

There are details on safety, minimising RFI, ununs, baluns, EFHW matching, the Rybakov - even a zig-zag portable dipole that fits in a folder. Now on sale on the RSGB website at [http://www.rsgbshop.org/acatalog/Online\\_Catalogue\\_Antennas\\_37.html](http://www.rsgbshop.org/acatalog/Online_Catalogue_Antennas_37.html)

## African DX

Zimbabwe, Z2. Antonio, DL4EA, will be active as Z24EA from 21 to 30 November. Activity will be on 160 to 6 metres using CW, SSB and possibly some digital modes. This includes an entry in the upcoming CQ WW CW contest. QSL to home call.

Senegal, 6W. Stan, EI6DX, will be active as 6W/EI6DX from Le Calao, Somone, Senegal, on 24 to 30 November 2010. This will include a Single-Op/All-Band/High-Power entry in the CQ WW DX CW Contest, using the special call 6V7Y. Stan will operate holiday style outside of the contest, mainly on 160, 80 and 30 metres CW. QSL via RX3RC, direct or bureau.







Morocco, CN. Operators Juan, EA5BLJ, Darío, EA5CP, and José, EA5YU, will activate the AR-RAM HQ station in Rabat, Morocco as 5C5T on 25 to 28 November 2010, including a Multi-Single entry in the CQ WW DX CW Contest. Outside the contest, they will be active on 80 to 10 m, 100 W, CW only. QSL via EA5YU, direct or bureau.

Djibouti, J2. Look for Darko, E70A to be active as J28AA from the Republic of Djibouti for the CQ WW DX CW Contest as a Single-Op/All-Band/Low-Power entry. QSL via K2PF and LoTW.

Zambia, 9J. Niko, S53A, will once again be active as 9J3A from The Hippo Lodge, <http://www.hippolodge.com>, Kafue National Park, between 23 and 29 November. He also plans to be active during the CQ WW DX CW Contest (27 and 28 November) as a Single-Op/Low-Power entry. His equipment will be a IC-7000, spiderbeam for the high bands (20 - 10 m), 80 m vertical, and a 40 m 2 element wire delta loop. QSL via S57S direct to: Aleksander Zagar, Golisce 132, SI-1281 Slovenia.

Sierra Leone, 9L. Members of the Voodoo Contest Group will operate as 9L5VT in the CQ WW DX CW Contest (November 27-28th) as a Multi/2 entry. This year's operation will be dedicated to Vince, K5VT, who became SK recently in April. QSL via LoTW or direct to G3SXW. Operators mentioned are Roger, G3SXW, Fred, G4BWP, Ned, AA7A and Bud, N7CW. The team is expected to start some sporadic activity on 22 November and should be in full swing by the 24th. Outside of the contest (before and after), operators will be signing as 9L7NS. Look for operations to be on the lower bands, RTTY and 30, 17 and 12 metres.

Kenya, 5Z, and Uganda, 5X. Nick, G3RW, is expected to show up as 5Z4LS from Kenya from 23 to 28 November. His next stop will be Uganda as 5X1NH from 30 November until 5 December. Nick works mostly on CW. QSLs via G3RWF, also via LoTW.

## African Islands on the Air

Marion Island, ZS8 (Update). Pierre, ZS1HF/ZS8M, reports that he has been QRT most of the month because his team is moving to the new base. However, Pierre states that the installation of the new station is almost complete, and his new SteppIR vertical should be up as you are reading this. He is expected to be on the air possibly as of November 21st. For more details, updates, pictures of the new station and to read Pierre's newsletter online, visit <http://www.iz8epy.it/html/zs8m.html>

Pantelleria, IG9. Tony, IK1QBT, and Emilio, IZ1GAR, will be active as IH9/IK1QBT and IH9/IZ1GAR from Pantelleria Island (IOTA AF-018, IIA TP-001, MIA MI-124, WLOTA 0041) on 23 - 30 November 2010. Their activity will include the CQ WW DX CW Contest. Tony will be a Single-Op/Single-Band (80 m) entry signing as IH9X. Emilio will be a Single-Op/Single-Band (40 m) entry signing as IH9R. Before the contest, they will be putting an emphasis on the lower bands. QSL via home calls, bureau or direct.

Tenerife Island, EA8. Look for Jean, EA8/ON5JV, and Georgette, EA8/ON6AK, to be active from Tijoco Bajo, Tenerife Island (AF-004, DIE S-012, WLOTA 1276, EAA TF) between 26 November 2010 and 23 February 2011. Activity on 40 - 10 metres SSB and CW. QSL via home calls, bureau preferred.





Lanzarote, Canary Islands, AF-004, EA8. Frank, EA8/DH5JG, will be active from Lanzarote (DIE S007) mostly on CW on 10 - 80 m (WARC bands preferred) from 22 November until 3 December. He will join the CQ WW DX CW Contest as well. QSL via bureau to his homecall.

Tristan da Cunha Islands, AF-029, ZD9. Dieter, DJ2EH, is working as ZD9T from Tristan da Cunha between 20 November and 8 December. QSL via homecall.

## Special Event

Austria, OE40. Members of the ADXB-OE (Austrian DX Board) will be celebrating their 40<sup>th</sup> anniversary by activating their club station OE1XBC on the air between 15 and 31 December, using the special call sign OE40ADXB. Suggested frequencies are as follows:

80 metres - SSB 3 630 - 3 650 kHz and CW 3 530 - 3 540 kHz

40 metres - SSB 7 125 - 7 150 kHz and CW 7 025 - 7 030 kHz

30 metres - CW 10 120 kHz and Digital 10 140 kHz

20 metres - SSB 14 225 - 14 235 kHz, CW 14 030 - 14 040 kHz, PSK 14 070 kHz and RTTY 14 085 kHz

17 metres - SSB 18 120 - 18 130 kHz and CW 18 080 - 18 085 kHz

15 metres - SSB 21 275 - 21 285 kHz and CW 21 030 - 21 040 kHz (if propagation)

12 metres - SSB 24 940 - 24 950 kHz and CW 24 900 - 24 905 kHz (if propagation)

10 metres - SSB 28 400 - 28 450 kHz and CW 28 030 - 28 040 kHz (if propagation)

There will be a special QSL card for this special event station. QSL info is via ADXB: Austrian DX Board, PO Box 1000, A-1081 Vienna, Austria.

New Zealand, ZL50. Members of the Papakura Radio Club (ZL1VK), NZART Branch 65 in South Auckland, will activate the special event call sign ZL50VK between 1 January and 31 March 2011. Activity is to celebrate the 50<sup>th</sup> anniversary of the club. Look for logs to be uploaded to LoTW and Club Log. QSL via ZL1VK. Visit their Web page at <http://www.qsl.net/zl1vk>

## Contest Calendar

This week's contests compiled by Bruce Horn, WA7BNM. The period covered is 22 to 29 November 2010.

### ARRL Sweepstakes SSB Contest

21:00 UTC 20 November to 03:00 UTC 22 November

Mode: SSB

Bands: 160, 80, 40, 20, 15 and 10 m

Classes: Single Op - QRP, Low, High or Unlimited; Multi-Op; School Club - College, Technical or Secondary

Max operating hours: 24 with at least 30 minute off times

Max power: HP: >150 watts; LP: 150 watts; QRP: 5 watts

Exchange: Serial no, precedence (Q, A, B, U, M, S), your call sign, check and ARRL/RAC Section

Work stations: Once only

QSO Points: 2 points per QSO

Multipliers: Each ARRL/RAC section and VE NT once

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 03:00 UTC 7 December 2010

E-mail logs to: SSPhone[at]arrl[dot]org

Mail logs to: November SS Phone, ARRL, 225 Main St., Newington, CT 06111, USA

Find rules at:

<http://www.arrl.org/sweepstakes>

NA Collegiate ARC SSB Championship





21:00 UTC 20 November to 03:00 UTC 22 November

Mode: SSB

Bands: 160, 80, 40, 20, 15 and 10 m

Classes: School Club (College)

Max operating hours: 24 with at least 30 minute off times

Max power: HP: >150 watts; LP: 150 watts;

QRP: 5 watts

Exchange: Serial no, precedence (Q, A, B, U, M, S), your call sign, check and ARRL/RAC section

Work stations: Once only

QSO Points: 2 points per QSO

Multipliers: Each ARRL/RAC section and VE NT once

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 03:00 UTC 7 December 2010

E-mail logs to: SSPhone[at]arrl[dot]org

E-mail log summary to: wm5r[at]wm5r[dot]org

Mail logs to: November SS Phone, ARRL, 225 Main St., Newington, CT 06111, USA

Find rules at:

<http://www.collegiatechampionship.org/rules/>

Run for the Bacon QRP Contest

02:00 - 04:00 UTC 22 November

Mode: CW

Bands: 160, 80, 40, 20, 15 and 10 m

Classes: Single Band; All Band

Max power: 5 watts

Exchange: RST, state, province or country and member no or power

Work stations: Once per band

QSO Points: 1 point per QSO with non-member; 3 points per QSO with member on same continent; 5 points per QSO with member on different continent

Multipliers: Each state, province or country once

Multiply mults by 2 if >50 members worked

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 28 November 2010

E-mail logs to: (none)

Upload log at:

<http://www.fqgrp.com/autolog.php>

Mail logs to: (none)

Find rules at:

<http://www.fqgrp.com/fqgrpun.php>

SKCC Sprint

00:00 - 02:00 UTC 24 November

Mode: CW

Bands: 160, 80, 40, 20, 15 and 10 m

Classes: (none)

Exchange: RST, name, state, province or country and SKCC no power

Work stations: Once per band

QSO Points: 1 point per QSO; Bonus Points: 5 points per Centurion member QSO per band; 10 points per Tribune member QSO per band; 25 points per QSO with SKCC club call, K9SKC per band

Multipliers: Each state, province or country once

Score Calculation: Total score = (total QSO points x total mults) and bonus points

Submit logs by: 23:59 UTC 26 November 2010

E-mail log summary to: (none)

Post log summary at:

<http://www.skccgroup.com/sprint/sks/sks-submit.html>

Mail logs to: (none)

Find rules at:

<http://www.skccgroup.com/sprint/sks/>

QRP Fox Hunt

02:00 - 03:30 UTC 24 November

Mode: CW

Bands: 80 m Only

Classes: Single Op - Fox or Hound

Max power: 5 watts

Exchange: RST, state, province or country, name and power output

QSO Points: 1 point per QSO

Multipliers: (none)

Score Calculation: Total score = total QSO points

Submit logs by: 03:30 UTC 25 November 2010

E-mail logs to: (see rules)

Mail logs to: (none)

Find rules at:

[http://www.qrpfoxhunt.org/winter\\_rules.htm](http://www.qrpfoxhunt.org/winter_rules.htm)



**RSGB 80 m CW Club Sprint**

20:00 - 21:30 UTC 24 November

Mode: CW

Bands: 80 m Only

Classes: 100 W; 10 W

Exchange: other station's call, your call, serial no and your name

QSO Points: 1 point per QSO

Multipliers: (none)

Score Calculation: Total score = total QSO points

Submit logs by: 1 December 2010

Upload log at:

<http://www.rsgbcc.org/cgi-bin/hfenter.pl>

Mail logs to: (none)

Find rules at:

<http://www.rsgbcc.org/hf/rules/2010/rsprint.shtml>**QRP Fox Hunt**

02:00 - 03:30 UTC 26 November

Mode: CW

Bands: 40 m Only

Classes: Single Op - Fox or Hound

Max power: 5 watts

Exchange: RST, state, province or country, name and power output

QSO Points: 1 point per QSO

Multipliers: (none)

Score Calculation: Total score = total QSO points

Submit logs by: 03:30 UTC 27 November 2010

E-mail logs to: (see rules)

Mail logs to: (none)

Find rules at:

[http://www.qrpfoxhunt.org/winter\\_rules.htm](http://www.qrpfoxhunt.org/winter_rules.htm)**NCCC Sprint**

03:30 - 04:00 UTC 26 November

Mode: (see rules)

Bands: (see rules)

Classes: (none)

Exchange: (see rules)

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 28 November 2010

E-mail logs to: (none)

Post log summary at:

<http://www.hornucopia.com/3830score/>

Mail logs to: (none)

Find rules at:

<http://www.ncccsprint.com/rules.html>**CQ Worldwide DX CW Contest**

00:00 UTC 27 November to 24:00 UTC 28 November

Mode: CW

Bands: 160, 80, 40, 20, 15 and 10 m

Classes: Single Op All Band - QRP, Low or High; Single Op Single Band - QRP, Low or High; Single Op Assisted All Band; Single Op Assisted Single Band; Xtreme Single Op; Multi-Single; Multi-Two; Multi-Multi; Xtreme Multi-Op

Max power: HP: 1 500 watts; LP: 100 watts;

QRP: 5 watts

Exchange: RST and CQ Zone no

Work stations: Once per band

QSO Points: 0 points per QSO with same country (counts as mult); 1 point per QSO with different country same continent; 2 points per QSO with different country same continent (NA); 3 points per QSO with different continent

Multipliers: Each CQ zone once per band; Each country once per band

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 21 December 2011

E-mail logs to: cw[at]cqww[dot]com

Mail logs to: CQ WW CW, CQ Magazine, 25 Newbridge Road, Hicksville, NY 11801, USA

Find rules at:

<http://www.cqww.com/CQWW-Rules-2010.pdf>[http://www.cqww.com/CQ\\_WW\\_Xtreme\\_Rules.pdf](http://www.cqww.com/CQ_WW_Xtreme_Rules.pdf)

## Next Week's Contests

QRP Fox Hunt, 02:00 - 03:30 UTC 1 December

ARCI Topband Sprint, 00:00 - 06:00 UTC 2 December







QRP Fox Hunt, 02:00 - 03:30 UTC 3 December

ARRL 160-Meter Contest, 22:00 UTC 3 December to 16:00 UTC 5 December

Wake-Up! QRP Sprint, 06:00 - 06:29 UTC; 06:30 - 06:59 UTC; 07:00 - 07:29 UTC and 07:30 - 08:00 UTC 4 December

TOPS Activity Contest 16:00 UTC 4 December to 15:59 UTC 5 December

AWA Bruce Kelley Memorial CW Contest, 23:00 UTC 4 December to 23:00 UTC 5 December and 23:00 UTC 11 December to 23:00 UTC 12 December

ARS Spartan Sprint, 02:00 - 04:00 UTC 7 December

## History This Week

A look back at events that made history this week - compiled by the Summerland Amateur Radio Club of Lismore, NSW. The week starting Monday 22 November 2010.

1861 - 1<sup>st</sup> telegraph line linking the US West and East coasts completed

1867 - Barbed wire patented by Joseph Gidden, USA

1867 - Alfred Nobel invents dynamite

1877 - Tom Edison announces his "talking machine" invention

1884 - Evaporated milk patented by J. Mayenberg, St Louis, Missouri, USA

1885 - Earliest photograph of a meteor shower made

1889 - First Jukebox used, Palais Royale Saloon, San Francisco, USA

1902 - Marconi sends faint signals across the Atlantic from Glace Bay to Poldhu

1910 - Royal Australian Navy created by the Australian Naval Defence Act

1922 - 2SB (later 2BL) was the first Australian commercial radio station to go to air

*Items used with acknowledgement to The ARRL Letter, Amateur Radio Newslite, OPDX Bulletin, 425 DX Bulletin, DXNL Bulletin, ARRL DX News, WIA-News, the RSGB News, Southgate ARC and Pete's DX Newsdesk.*

*Newsletter editors are most welcome to use material from HF Happenings, just remember to acknowledge the source (which could be any one of the names mentioned above). HF Happenings can be provided in MS Word format.*

